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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/679,577
Filing Date: October 06, 2003
Appellant(s): LAZARIDIS ET AL.

Leslie A. Kinsman
Reg. No. 45,291
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08/19/2011 appealing from the Office action mailed 04/21/2011

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application: claims 1 and 3-11.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

Patent 5408060	Muurineen	04/18/1995.
US2002/0054676A1	Zhao et al.	05/09/2002.
US6693272B2	Adachi et al.	09/20/2001.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1, 3-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muurinen U.S. Patent 5,408,060 in view of Zhao et al. U.S. Pub. 2002/0054676.

Regarding claim 1, Muurinen teaches a mobile device for executing at least two applications (implied, applications involved the use of alphanumeric characters such as text messaging or numeric characters, calculating), having a keyboard (figure 7, unit 14); Said keyboard having a plurality of keys (see figure 7), each of the keys having at least two pre-existing indicia depicted thereon (see figures 1 through 4b); a backlight controller (see figures 8-13 and columns 3-4) responsive to the active input mode provided by an input mode selector (Figure 7, unit 16) for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys, the illuminated indicia defining an active portion of the keyboard of the mobile device (see columns 3- 4).

Muurinen, however, teaches an input mode selector (figure 7, unit 16) so that a desired application (applications involved the use of alphanumeric characters such as text messaging or numeric characters, calculating) can be manually selected by the user; instead of (automatic) selection, from one of the at least two applications, a signal indicative of a default active input mode in response to execution of the one of the at least two applications.

Zhao et al., in the same field of endeavor, teaches a mobile device for executing at least two applications. Said mobile device has a keyboard having a plurality of keys, each of the plurality of keys having at least two pre-existing indicia (see figures 1-3; characters and numerical symbols). Said mobile device also has an input mode selector for (automatic) receiving from one of the at least two applications, a signal indicative of a default active input mode in response to execution of the one of the at least two applications and for determining an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode (see paragraph [0020], [0022], [0029] and [0032]).

Since both teachings of Muurinen and Zhao et al. pertain to entry of data in a communication device (phone) which involve entry of numbers and characters on keys; and Muurinen teaches the problem of having two indicia on keys on a phone device and uses the illumination of portions of the keys to solve the problems; Thus, Muurinen teaches/suggests the solution to the same problem found on the keyboard taught by Zhao et al; and Zhao et al. teaches that the mode switching does not have to be manually actuated but may be done automatically; Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to alternatively provide to the mobile device of Muurinen an (automatic) input mode selector for (automatic) receiving from one of the at least two applications, a signal indicative of a default active input mode in response to execution of the one of the at least two applications and for determining an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode, as suggested by Zhao et al., so that explicit or manual mode selection of said mobile device can be alternatively substituted by said (automatic) mode selection, as explained above.

Regarding claim 3, the active mode determined by the input mode selector of Muurinen in view of Zhao et al. is also one of a numeric mode, an alphabetic mode (see figures 1-6), a non-alphabetic mode, a full keyboard mode, a directional mode and a gaming mode.

Regarding claim 4, the active portion of the keyboard of Muurinen in view of Zhao et al. is also selectively illuminated by the at least one light source is a portion of at least one key on the keyboard (see figures 2-4).

Regarding claim 5, the at least one light source of the device of Muurinen in view of Zhao et al. also includes at least one light emitting diode (see column 3, lines 25-27).

Regarding claim 6, Muurinen also teaches the at least one light emitting diode being connected to the keyboard by at least one light pipe (column 6 lines 24-25 and figures 9-10, unit 19).

Regarding claim 7, the active portion disclosed by Muurinen is also illuminated using a different illumination level than a non-active portion of the keyboard (column 3, lines 11-66). Even though, Muurinen does not specifically teach using a different single color illumination level for the active portion than a non-active portion of the keyboard, however, one of ordinary skill in the art would recognize that using different illumination levels of a single color or multiple colors would be functionally equivalent for distinguishing the active and non\- active portion(s) of the keyboard. Therefore, by choice of design, it would have been obvious to one of ordinary skill in the art to provide different illumination levels of a single color for the active/non-active portion(s) of the keyboard.

Regarding claim 9, the active portion disclosed by Muurinen is also selectively illuminated using a colored light.

Regarding claim 10, Muurinen also teaches selectively illuminating the active portion using a different color than a non-active portion of the keyboard (column 3, lines 11-66).

Regarding claim 11, the one of the at least two applications taught by Muurinen in view of Zhao et al. also includes one of a telephone dialer application, an email application, a notepad application, and a game application (see figure 7 of Muurinen).

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muurinen U.S. Patent 5,408,060 in view of Zhao et al. U.S. Pub. 2002/0054676 and in further view of Adachi et al. U.S. Patent 6,693,272.

Regarding claim 8, Muurinen n view of Zhao et al. teaches the mobile device of claim 1, however, Muurinen in view of Zhao et al. does not specifically teach that the active portion is selectively illuminated using optical cancellation.

Adachi et al. teaches a device wherein optical cancellation method is employed for canceling undesired optical signals to achieve optimal illumination. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide optical cancellation method to the mobile device disclosed by Muurinen in view of Zhao et al., as evidenced by Adachi et al. so that optimal illumination of the desired keys disclosed by Muurinen in view of Zhao et al. can be achieved.

(10) Response to Argument

a) Appellants argue that Muurinen does not contemplate automatically controlling the illumination of the keyboard in response to the execution of an application.

The Examiner asserts that the Appellants misinterpret the teaching in the indicated column/lines of Muurinen. Column 4 lines 60-64 of Muurinen states "**ANOTHER ALTERNATIVE** would be to illuminate the symbol denoting of the mode of operation which is not in use or which well be next in succession. This indicates clearly the change in the mode of operation to be implemented by the subsequent use of the function key". Nothing in the cited column/lines assures that the function key 16 must be a toggle switch. In fact, Muurinen teaches that the symbol denoting "the mode of operation which is not in use or which will be next in succession" will be illuminated to indicate "clearly the change in the mode of operation to be implemented by the subsequent use of the function key" (see Muurinen at column 4, lines 60-64). Thus, it is evident that the pushbutton key 16 is a toggle switch.

b) Appellants argue that Murineen in view of Zhao does not disclose an input mode selector configured to receive, from one of the at least two applications, a signal indicative of a default active input mode automatically in response to execution of the one of the at least two applications, the input mode selector configured to determine and for determining an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode, the keyboard having a plurality of keys, each of the plurality of keys having at least two pre-existing indicia depicted thereon; and a backlight controller configured to receive a signal indicative of the active input mode from the input mode selector, the backlight controller, responsive to the signal indicative of the active input mode provided by the input mode selector, configured to control for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys, the illuminated indicia defining an active portion of the keyboard of the mobile device.

The Examiner maintains that Muurinen does teach: a manual input mode selector and a backlight controller responsive to the active input mode provided by the input mode selector. Said a backlight controller for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys, wherein the Examiner explicitly stated and provided evidence that Muurinen DOES teach a MANUAL INPUT MODE SELECTOR (not an AUTOMATIC input mode selector, as claimed). Therefore, the Examiner applied the secondary reference Zhao, which teaches an AUTOMATIC input mode selector, as claimed ; And Zhao et al. does teach an input mode selector for (automatically) receiving from one of the at least two applications, a signal indicative of a default active input mode in response to execution of the one of the at least two applications and for determining an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode. The purpose of a 35 U.S.C. 103(a) rejection is to combine a partial teaching of one reference with another partial teaching of another reference given proper motivation. Appellants focus on each applied reference to find ALL the teachings with respect to claim 1. To respond to the Appellants' arguments, the Examiner would like to individually list out the teaching of each applied reference (Muurinen and Zhao et al.): Muurinen teaches: a manual input mode selector. a backlight controller responsive to the active input mode provided by the input mode selector. Said a backlight controller for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys. Zhao et al. teaches: mobile device for executing at least two applications. Said mobile device has a keyboard having a plurality of keys, each of the plurality of keys having at least two pre-existing indicia (see figures 1-3 characters and numerical symbols). Said mobile device also has an input mode selector for (automatically) receiving from one of the at least two applications, a signal indicative of a default active input mode in response to execution of the one of the at least two applications and for determining an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode (see paragraph [0020], [0022], [0029] and [00321). Since both teachings of Muurinen and Zhao et al. pertain to entry of data in a communication device (phone) which involve entry of numbers and characters on keys; and Muurinen teaches the problem of having two indicia on keys on a phone device and uses the illumination of portions of the keys to solve the problems; Thus, Muurinen teaches/suggests the solution to the same problem found on the keyboard taught by Zhao et al; and Zhao et al. teaches that the mode switching does not have to be manually actuated but may be done automatically; Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to alternatively provide to the mobile device of Muurinen an (automatic) input mode selector for (automatic) receiving from one of the at least two applications, a signal indicative of a default active input mode in response to execution of the one of the at least two applications and for determining an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode,

as suggested by Zhao et al., so that explicit or manual mode selection of said mobile device can be alternatively substituted by said (automatic) mode selection, as explained above.

c) Appellants argue the combination of Muurineen and Zhao is improper and the substitution suggested by the Examiner would change the principle of operation of the prior art invention being modified.

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ

871 (CCPA 1981); *In re Merck& Co.*, 800 F.2d 1091,231 USPQ 375 (Fed. Cir. 1986). The claimed limitation "..backlight controller for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys" is met by the teaching of Muurinen. The teaching of Zhao was applied in conjunction with the teaching of Muurinen to show that the concept of having.. "an input mode selector for automatically receiving from one of the at least two applications, a signal indicative of a default active input mode in response to execution of the one of the at least two applications and for determining an active input mode of the keyboard of a mobile device in accordance with the received signal indicative of the default active input mode"

would have been obvious to one of ordinary skill in the art based on the teachings of BOTH references. Therefore, The Examiner asserts that the suggested substitution and modification of the input device of Muurinen (based on the teachings of Muurinen and Zhao) would improve the functionalities of the device of Muurinen and would not change the principle of operation of said device.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

AMINE BENLAGSIR

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